

DAFTAR PUSTAKA

- Abrahams, J. M. & Chen, W. (2007). *Composition and Method for Vascular Embolization*. US Patent, US 20070031468 A1.
- Akiyama, H., Oono, T., Saito, M. & Iwatsuki, K. (2004). Assessment of cadexomer iodine against *Staphylococcus aureus* biofilm in vivo and in vitro using confocal laser scanning microscopy. *Journal of Dermatology*, 3(7): 529-534
- Andrade, P. F., Fonseca, A., Oliveira, S. R., Aurélio, M., Arruda, Z., & Gonçalves, C. (2015). Improved antibacterial activity of nanofiltration polysulfone membranes modified with silver nanoparticles. *Water Research*, (2015). <https://doi.org/10.1016/j.watres.2015.05.006>
- Arimoto, H. α - γ Transition of nylon 6. (1964). *Journal of Polymer Science Part A* : 2, 2283-2295
- Atwater, J. E. (1996). Numerical simulation of iodine speciation on relation to water disinfection aboard manned spacecraft I. equilibria. *Journal of Environmental Science Health*, A31(8), 1965-1979.
- Backer, H., & Hollowell, J. (2000). Use of iodine for water disinfection: Iodine toxicity and maximum recommended dose. *Environmental Health Perspectives*, 108(8), 679–684. <https://doi.org/10.1289/ehp.00108679>
- Banerjee, I., Pangule, R. & Kane, R. (2011). Antifouling coatings: recent developments in the design of surface that prevent fouling by proteins, bacteria, and marine organisms. *Advanced Materials*, 23, 690-718. <https://doi.org/10.1002/adma.201001215>
- Banerjee, M., Mallick, S., Paul, A., Chattopadhyay, A., & Ghosh, S. S. (2010). Heightened reactive oxygen species generation in the antimicrobial activity of a three component iodinated chitosan/silver nanoparticle composite. *Langmuir*, 26(8), 5901–5908. <https://doi.org/10.1021/la9038528>
- Basri, H., Ismail, A. F., & Aziz, M. (2011). Polyethersulfone (PES)–silver composite UF membrane: Effect of silver loading and PVP molecular weight on membrane morphology and antibacterial activity. *DES*, 273(1), 72–80. <https://doi.org/10.1016/j.desal.2010.11.010>
- Boothman, S. (2009). The Use of Iodine in Wound Therapy. *Systagenix Wound Management*, 1–39.
- Capriotti, K. & Capriotti, J. A. (2012). Topical iodophor preparations: Chemistry, microbiology, and clinical utility. *Dermatology Online Journal*, 18(11). Retrieved from: <http://escholarship.org/uc/item/9rp912j2>
- Chang, I., Clech, P., Jefferson, B., & Judd, S. (2016). Membrane fouling in membrane bioreactors for wastewater treatment. *Journal of Environmental Engineering*, 128(1018-1029). [https://doi.org/10.1061/\(ASCE\)0733-9372\(2002\)128:11\(1018\)](https://doi.org/10.1061/(ASCE)0733-9372(2002)128:11(1018))

- Coates, J. (2000). Interpretation of Infrared Spectra, A Practical Approach. *Encyclopedia of Analytical Chemistry*. John Wiley & Sons, Inc
- Cooper , R. A. (2007) Iodine revisited. *Internal Wound Journal*; 4(2): 124-37.
- Davis, M. (2010). *Water and Wastewater Engineering. Journal of the Franklin Institute* (Vol. 284). [https://doi.org/10.1016/0016-0032\(67\)90545-5](https://doi.org/10.1016/0016-0032(67)90545-5)
- Duan, L., Wang, Y., Zhang, Y., & Liu, J. (n.d.). *Graphene immobilized enzyme/polyethersulfone mixed matrix membrane: Enhanced antibacterial, permeable and mechanical properties. Applied Surface Science*. Elsevier B.V. <https://doi.org/10.1016/j.apsusc.2015.07.127>
- Dutta, P. K., Dutta, J., & Tripathi, V. S. (2004). Chitin and chitosan : Chemistry, properties and applications, 63(January), 20–31.
- Fane, A. G., Tang, C. Y., & Wang, R. (2011). 4.11 - Membrane Technology for Water: Microfiltration, Ultrafiltration, Nanofiltration, and Reverse Osmosis. *Treatise on Water Science*, 301–335. <https://doi.org/http://dx.doi.org/10.1016/B978-0-444-53199-5.00091-9>
- Gao, W., Liang, H., Ma, J., Han, M., Chen, Z. lin, Han, Z. S, & Li, G. B. (2011). Membrane fouling control in ultrafiltration technology for drinking water production: A review. *Desalination*. <https://doi.org/10.1016/j.desal.2011.01.051>
- General Electric Company. (2014). *Cross Flow Filtration Method Handbook*. 29-0850-76 AB
- Goy, R. C., Britto, D. D, & Assis, O. B. G. (2009). A review of the Antibacterial Activity of chitosan. *Polimeros: Ciencia E Tecnologia*, 19(3), 241–247. <https://doi.org/10.1590/S0104-14282009000300013>
- Harris, J. M. (1992). Poly(ethylene glycol) chemistry. New York : Springer US. <https://doi.org/10.1007/978-1-4899-0703-5>
- Huang, J., Wang, H., & Zhang, K. (2014). Modification of PES membrane with Ag-SiO₂: Reduction of biofouling and improvement of filtration performance. *Desalination*, 336(1), 8–17. <https://doi.org/10.1016/j.desal.2013.12.032>
- Ibrahim, K. S. (2013). Carbon nanotubes-properties and applications: a review. *Carbon Letters*, 14(3), 131–144. <https://doi.org/10.5714/CL.2013.14.3.131>
- Iorhemen, O. T., Hamza, R. A., & Tay, J. H. (2016). Membrane Bioreactor (MBR) Technology for Wastewater Treatment and Reclamation : Membrane Fouling, 13–16. <https://doi.org/10.3390/membranes6020033>
- Kato, M.; Mineshima, N.; Kato, T.; Kawada, Y.; Hanada, Hironori; Inomata, T. (1981). Chitosan-iodine adduct. *US Patent, US4275194A*.

- Koros, W. J., Ma, Y. H., Shimidzu, T. (1996). Terminology for membranes and membrane process. *Pure & Applied Chemistry*, 68(7), 1479-1489
<https://doi.org/10.1351/pac1199668071479>
- Lengeler, J. W., Gerhat, D., & Schlegel, H. G. (1999). *Biology of the Prokaryotes*. Jerman : Thieme Sturtgart
- Ma, Y., Shi, F., Ma, J., Wu, M., Zhang, J., & Gao, C. (2011). Effect of PEG additive on the morphology and performance of polysulfone ultrafiltration membranes. *Desalination*, 272(1-3), 51-58.
<https://doi.org/10.1016/j.desal.2010.12.054>
- Meng, J., Zhang, X., Ni, L., Tang, Z., Zhang, Y., Zhang, Y., & Zhang, W. (2014). Antibacterial cellulose membrane via one-step covalent immobilization of ammonium/amine groups. *DES*, 359(2015), 156-166.
<https://doi.org/10.1016/j.desal.2014.12.032>
- Moridi, Z., Mottaghitalab, V., dan Haghi, A. K. (2011). *Detailed Review of Recent Progress in Carbon Nanotube/Chitosan Nanocomposites*. Iran
- Munir, A. (2006). *Dead End Membrane Filtration*. (disertasi). Laboratory Feasibility Studies in Enviromental Engineering.
- Nicolaisen, B. (2003). Developments in membrane technology for water treatment. *Desalination*, 153(1-3), 355-360. [https://doi.org/10.1016/S0011-9164\(02\)01127-X](https://doi.org/10.1016/S0011-9164(02)01127-X)
- Ouchi, T., Nishizawa, H., & Ohya, Y. (1998). Aggregation phenomenon of PEG-grafted chitosan in aqueous solution. *Polymer*, 39(21), 5171-5175.
[https://doi.org/10.1016/S0032-3861\(97\)10020-9](https://doi.org/10.1016/S0032-3861(97)10020-9)
- Popov, V. N. (2004). Carbon nanotubes: Properties and application. *Materials Science and Engineering R: Reports*, 43(3), 61-102.
<https://doi.org/10.1016/j.mser.2003.10.001>
- Primastari, D. (2015). *Pengaruh penambahan filler MWCNT terhadap kinerja membran filtrasi kitosan-PEG* (skripsi). Bandung : Universitas Pendidikan Indonesia
- Punyani, S., Narayana, P., Singh, H., & Vasudevan, P. (2006). Iodine based water disinfection: A review. *Journal of Scientific and Industrial Research*, 65(2), 116-120.
- Rahimi, Z., Zinatizadeh, A. A. L., & Zinadini, S. (2015). Preparation of high antibiofouling amino functionalized MWCNTs/PES nanocomposite ultrafiltration membrane for application in membrane bioreactor. *Journal of Industrial and Engineering Chemistry*.
<https://doi.org/10.1016/j.jiec.2015.04.017>
- Rinaudo, M., & Ñ, M. R. (2006). Chitin and Chitosan: Properties and

- applications. *Progress in Polymer Science*, 31(7), 603–632. <https://doi.org/10.1016/j.progpolymsci.2006.06.001>
- Rowe, R. C., Sheskey, P. J & Quinn, M. E. (2009). Handbook of Pharmaceutical 6th edition. London:Pharmaceutical Press
- Sahoo, N. G., Rana, S., Cho, J. W., Li, L., & Chan, S. H. (2010). Polymer nanocomposites based on functionalized carbon nanotubes. *Progress in Polymer Science*, 35(7), 837–867. <https://doi.org/10.1016/j.progpolymsci.2010.03.002>
- Sathish, T., & Aparna, H. (2014). Original Research Article Anti-biofouling activity of Prodigiosin, a pigment extracted from *Serratia marcescens*, 3(5), 712–725.
- Saito, H., Wu, X., Harris, J. M., Hoffman, A. S. (1997). Graft copolymer of poly(ethylene glycol) (PEG) and chitosan. *Macromolecular Rapid Community*, 18, 547-550. <https://doi.org/10.1002/marc.1997.030180703>
- Sai, M., Guo, R., Chen, L., Xu, N., Tang, Y., Ding, D. (2016). Research on The Preparation and Characterization of Chitosan Grafted Polyvinylpyrrolidone Gel Membrane with Iodine. *Journal of Applied Polymer Science* 2015, 132 (14) 1-9, <https://doi.org/10.1002/APP.41797>.
- Safty, S. & Hoa, N. D. (2012). Organic-inorganic mesoporous silica alumina membranes for ultrafine filtration of noble metal nanoparticles. *Noble Metals*. <https://doi.org/10.5772/33768>
- Schmeling, N., Konietzny, R., Sieffert, D., Rolling, P. & Staudt, C. (2010). Functionalized copolyimide membranes for the separation of gaseous and liquid mixtures. *Beilstein Journal of Organic Chemistry*, 6, 789-800. <https://doi.org/10.3762/bjoc.6.86>
- Shigeno, Y. Kondo, Takemoto, K. (1981). Functional Monomer and Polymers, 91 a, On the Adsorption of Iodine and Bromine onto Polystyrene-Grafted Chitosan. *Makromol. Chem.* 182, 709 - 712 (1981) *I09 Rapid*
- Smart, S. K., Cassady, A. I., Lu, G. Q., & Martin, D. J. (2006). The biocompatibility of carbon nanotubes. *Carbon*, 44(6), 1034–1047. <https://doi.org/10.1016/j.carbon.2005.10.011>
- Sonune, A., & Ghate, R. (2004). Developments in wastewater treatment methods. *Desalination*, 167(1–3), 55–63. <https://doi.org/10.1016/j.desal.2004.06.113>
- Sun, X., Cao, Z., Porteous, N., & Sun, Y. (2012). An N-halamine-based rechargeable antimicrobial and biofilm controlling polyurethane. *Acta Biomaterialia*, 8(4), 1498–1506. <https://doi.org/10.1016/j.actbio.2011.12.027>
- Vatanpour, V., Shockravi, A., Zarrabi, H., Nikjavan, Z., & Javadi, A. (2015). Fabrication and characterization of anti-fouling and anti-bacterial Ag-loaded graphene oxide/polyethersulfone mixed matrix membrane. *Journal of*

Industrial and Engineering Chemistry, 1–11.
<https://doi.org/10.1016/j.jiec.2015.06.004>